

# 6ER5

## High-Mu Triode

### 7-PIN MINIATURE TYPE

#### GENERAL DATA

##### Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . .	6.3	volts
Current . . . . .	0.18	amp

Direct Interelectrode Capacitances:

	<i>Without External Shield</i>	<i>With External Shield<sup>0</sup></i>	
Grid to plate . . . . .	0.38	0.36	$\mu\mu\text{f}$
Grid to cathode, internal shield, and heater. . . . .	4.4	4.4	$\mu\mu\text{f}$
Plate to cathode, internal shield, and heater. . . . .	3	4	$\mu\mu\text{f}$
Grid to heater. . . . .	0.28 max.	0.28 max.	$\mu\mu\text{f}$
Plate to cathode. . . . .	0.24	0.2	$\mu\mu\text{f}$
Cathode to grid . . . . .	3.1	3.1	$\mu\mu\text{f}$
Heater to cathode . . . . .	2.5	2.5	$\mu\mu\text{f}$

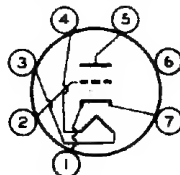
##### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Voltage . . . . .	200	volts
Grid Voltage. . . . .	-1.2	volts
Amplification Factor. . . . .	80	
Plate Resistance (Approx.). . . . .	8000	ohms
Transconductance. . . . .	10500	$\mu\text{mhos}$
Plate Current . . . . .	10	ma
Grid Voltage (Approx.) for transconductance ( $\mu\text{mhos}$ ) = 500. . . . .	-3.8	volts
Grid Voltage (Approx.) for transconductance ( $\mu\text{mhos}$ ) = 100. . . . .	-5.6	volts

##### Mechanical:

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	2-1/8"
Maximum Seated Length. . . . .	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip). . . . .	1-1/2" $\pm$ 3/32"
Diameter. . . . .	0.650" to 0.750"
Dimensional Outline . . . . .	See <i>General Section</i>
Bulb. . . . .	T5-1/2
Base. . . . .	Small-Button Miniature 7-Pin (JEDEC No. E7-1)
Basing Designation for BOTTOM VIEW. . . . .	7FP

Pin 1 - Cathode  
Pin 2 - Grid  
Pin 3 - Heater  
Pin 4 - Heater



Pin 5 - Plate  
Pin 6 - Internal  
Shield  
Pin 7 - Cathode

← Indicates a change.



RADIO CORPORATION OF AMERICA  
Electron Tube Division  
Harrison, N. J.

DATA  
8-60

# 6ER5

## AMPLIFIER — Class A<sub>1</sub>

### Maximum Ratings, Design-Center Values:

PLATE VOLTAGE . . . . .	250 max.	volts
GRID VOLTAGE:		
Negative-bias value . . . . .	50 max.	volts
CATHODE CURRENT . . . . .	20 max.	ma
PLATE DISSIPATION . . . . .	2.2 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode .	100 max.	volts
Heater positive with respect to cathode .	100 max.	volts

### Maximum Circuit Values:

Grid-Circuit Resistance . . . . .	1 max.	megohm
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- With external shield JEDEC No.316 connected to cathode except as noted.
- With external shield JEDEC No.316 connected to ground.

→ Indicates a change.

